FHWA Photo

FHWA Photo

Photo Courtesy of ITS World

MODULE 8

ITS/CVO Mainstreaming
& Next Steps

ITS/CVO Mainstreaming & Next Steps (Organizational Infrastructure)

Program Areas

Safety Assurance	Credentials Administration	Electronic Screening	Carrier Operations
• Access to driver, vehicle, and carrier information on inspections and accidents • Automated inspections and reviews • Onboard safety monitoring	• Electronic credentialing • Clearinghouses • Interagency data exchange • Interstate data exchange	• Automated weight and credentials screening • International electronic border clearance	• Fleet and vehicle management • Traveler information systems • Hazardous Materials incident response

CVISN Architecture (Technical Infrastructure)

Mainstreaming and Deployment Planning (Organizational Infrastructure)

Learning Objectives

Participants will be able to:

- **Describe** ITS/CVO Mainstreaming

- **Identify** Potential ITS/CVO Funding Sources

- **Describe** the ITS/CVO Deployment Strategy

- **Outline** the CVISN Implementation Process

- **Identify** Sources of Technical Assistance

Module Structure

- Mainstreaming

- Government Organization, Roles

- TEA-21 and Funding Sources

- Deployment Strategy

- CVISN Implementation Process

- Sources of Technical Assistance

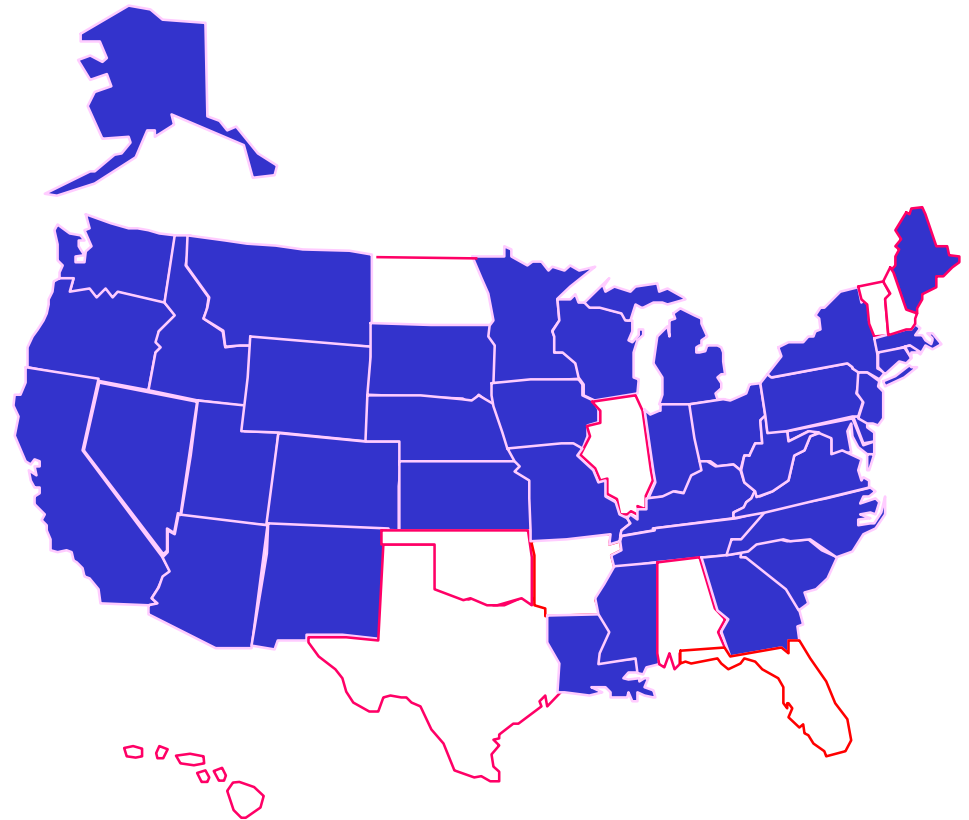# Notes

ITS/CVO Mainstreaming

Definition

FHWA initiative designed to *foster* and *support* ITS/CVO deployment and to *communicate* the program to all stakeholders.

Program Objective

- **Incorporate ITS/CVO into state & metro transportation planning**

- **Coordinate ITS/CVO activities among agencies and states**
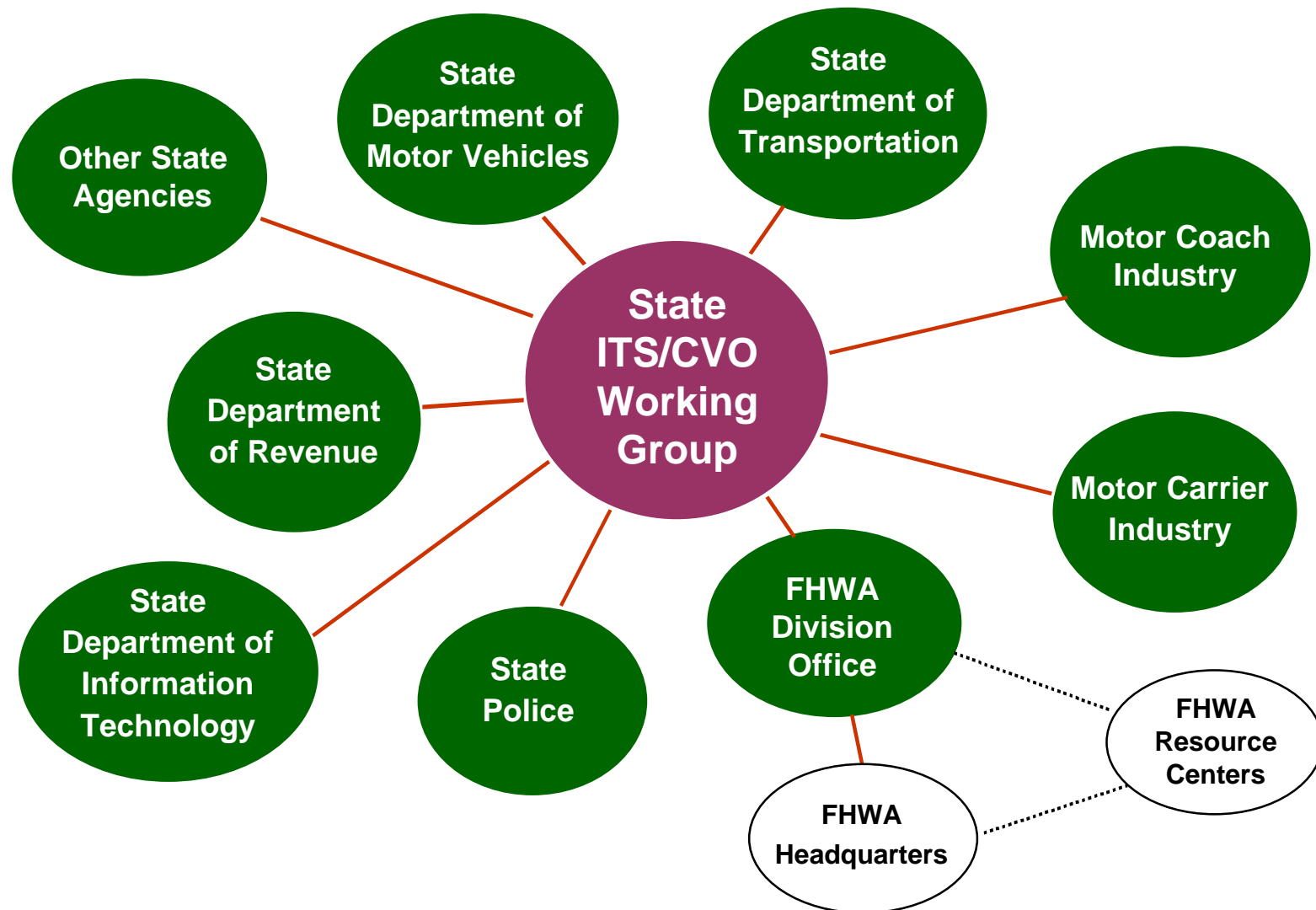
- **Explain the ITS/CVO program to key decision makers**

Participating States

Forty states are participating in the ITS/CVO Mainstreaming Initiative

Participating in Program

State ITS/CVO Working Group

State ITS/CVO Working Group

Other State Agencies

State Department of Motor Vehicles

State Department of Transportation

Motor Coach Industry

State Department of Revenue

Motor Carrier Industry

State Department of Information Technology

State Police

FHWA Division Office

FHWA Headquarters

FHWA Resource Centers

Roles & Responsibilities - Government

- **State and Local Governments (Regulatory Agencies)**
    - Invest in ITS technology
    - Provide data to other states
    - Establish info infrastructure
    - Change processes to allow electronic commerce and paperless vehicles
    - Operate and maintain ITS/CVO systems

- **State and Local Governments (Planning Agencies)**
   - Set funding priorities

- **DOT/FHWA Headquarters**
    - Provide leadership
    - Develop architecture
    - Develop deployment plan
    - Support system integration
    - Provide funding
    - Expedite ITS/CVO deployment

- **FHWA Division and Resource Centers**
    - Coordinate with states
    - Participate in state ITS/CVO working groups
    - Provide technical assistance to states

State ITS/CVO Working Group
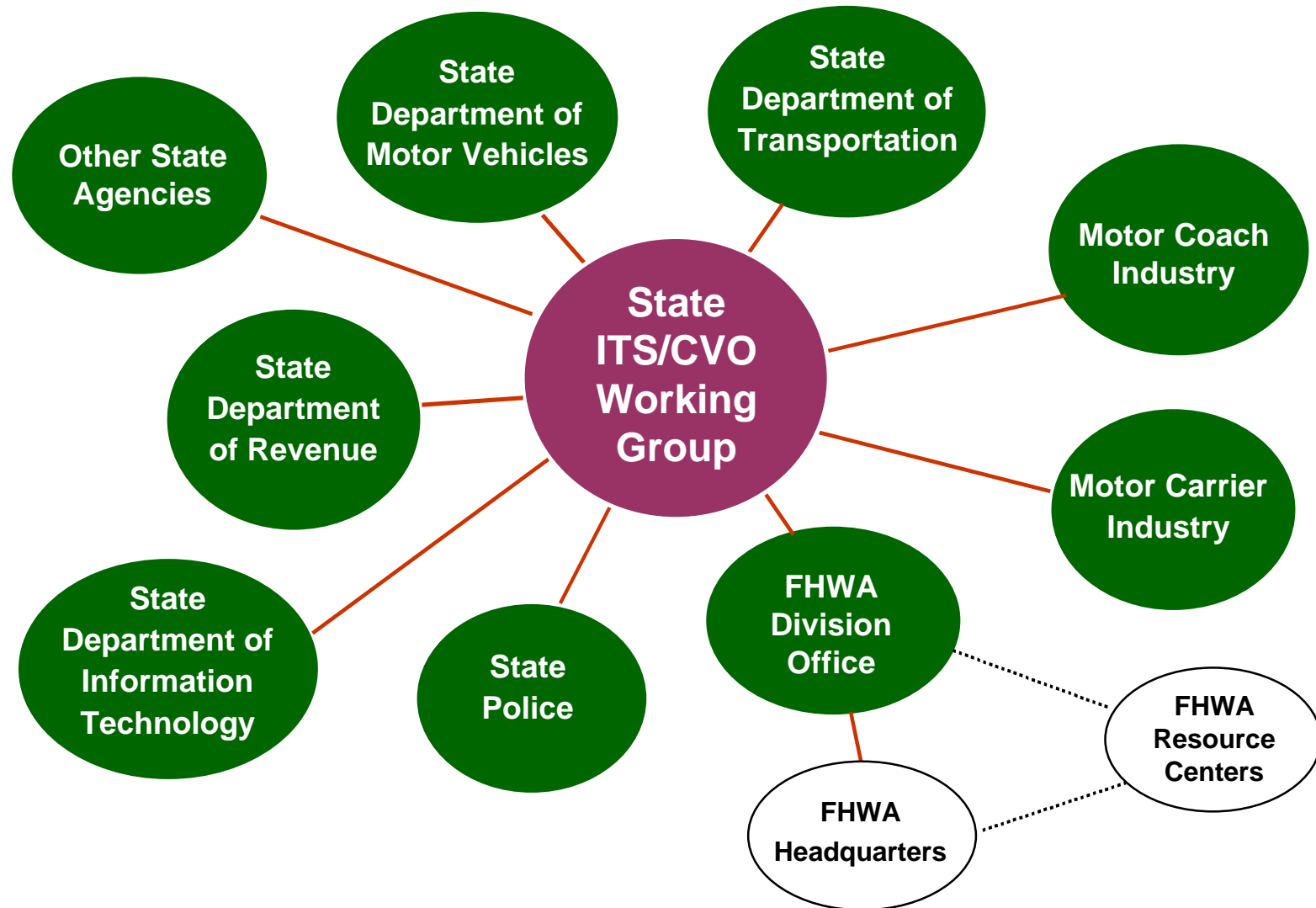
Roles & Responsibilities - Private Organizations

- **Carriers/Drivers**
  - Participate in CVISN projects
  - Install vehicle transponders
  - Invest in other technology when justified by benefit

- **Professional & Trade Associations**
  - Organize membership to participate in ITS CVISN activities
  - Help to build consensus

- **Operational Tests & Consortiums**
  - Demonstrate CVISN concepts
  - Prototype/adopt CVISN standards

- **Shippers & Public**
  - Support CVISN initiatives

- **Service Providers & Manufacturers**
  - Develop technologies
  - Provide products & services

CVISN and TEA-21

Nationwide Deployment Goal

"Complete deployment of CVISN in a majority of States by September 30, 2003" *(TEA-21)*

Architectural Conformance Requirement

All ITS projects funded from the Highway Trust Fund must be consistent with the national architecture and applicable standards *(for more information, see Section 5206 (e) of TEA-21)*

FHWA Strategy

Provide all States the CVO architecture and standards, tools (training and workshops), and guidance to implement CVISN Level 1 functionality

Potential Funding Sources for ITS/CVO Projects

Federal

- ITS R&D funds
- ITS/CVO deployment incentive funding
- MCSAP
- PRISM
- Federal-aid highway programs (NHS, STP, etc.)
- New TEA-21 programs (e.g., Borders and Trade Corridors)
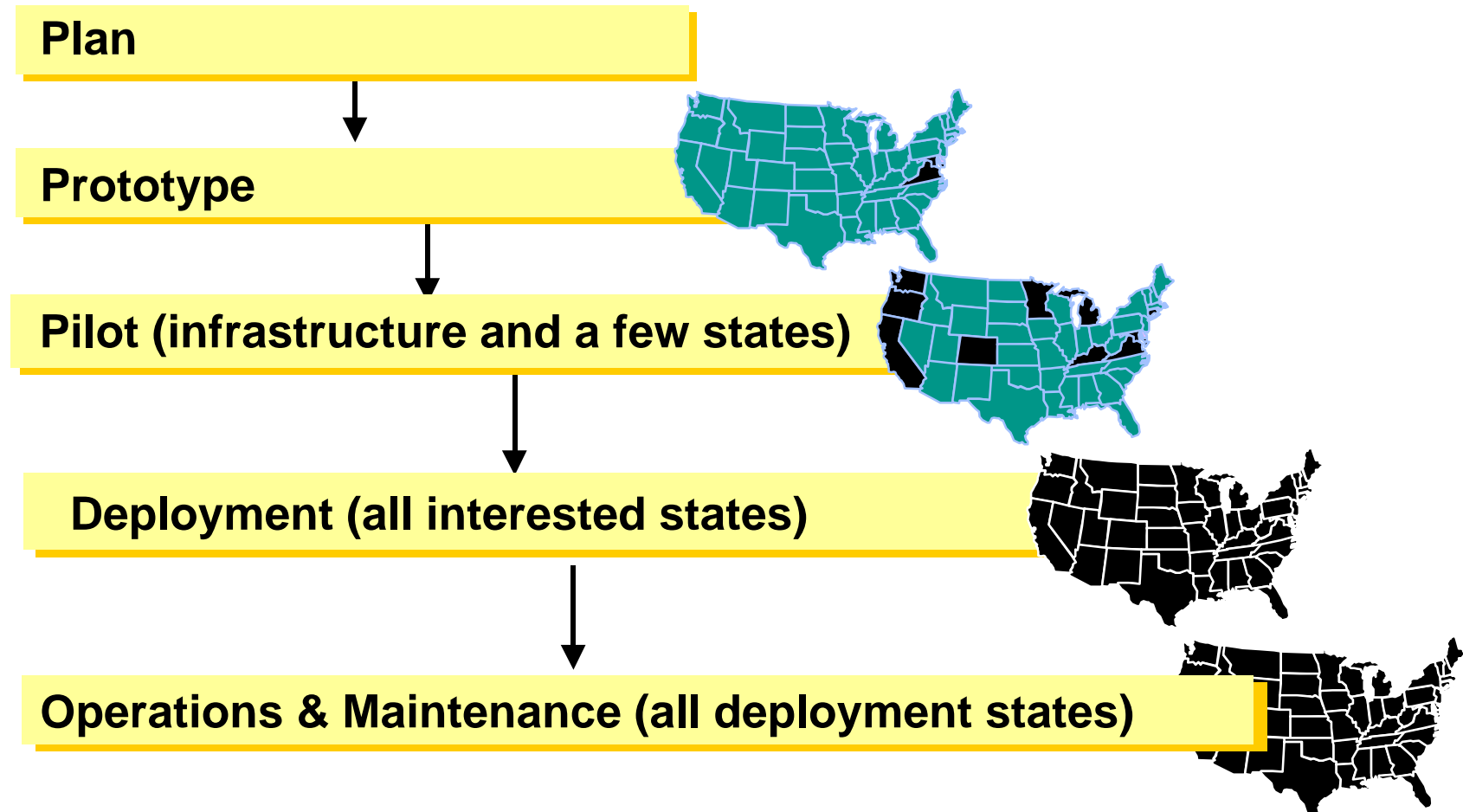- Other Federal agencies

State

- Legislative appropriations
- Agency operating budgets
- Pooling (public/private partnerships)
- Innovative financing

Private Sector

- User fees
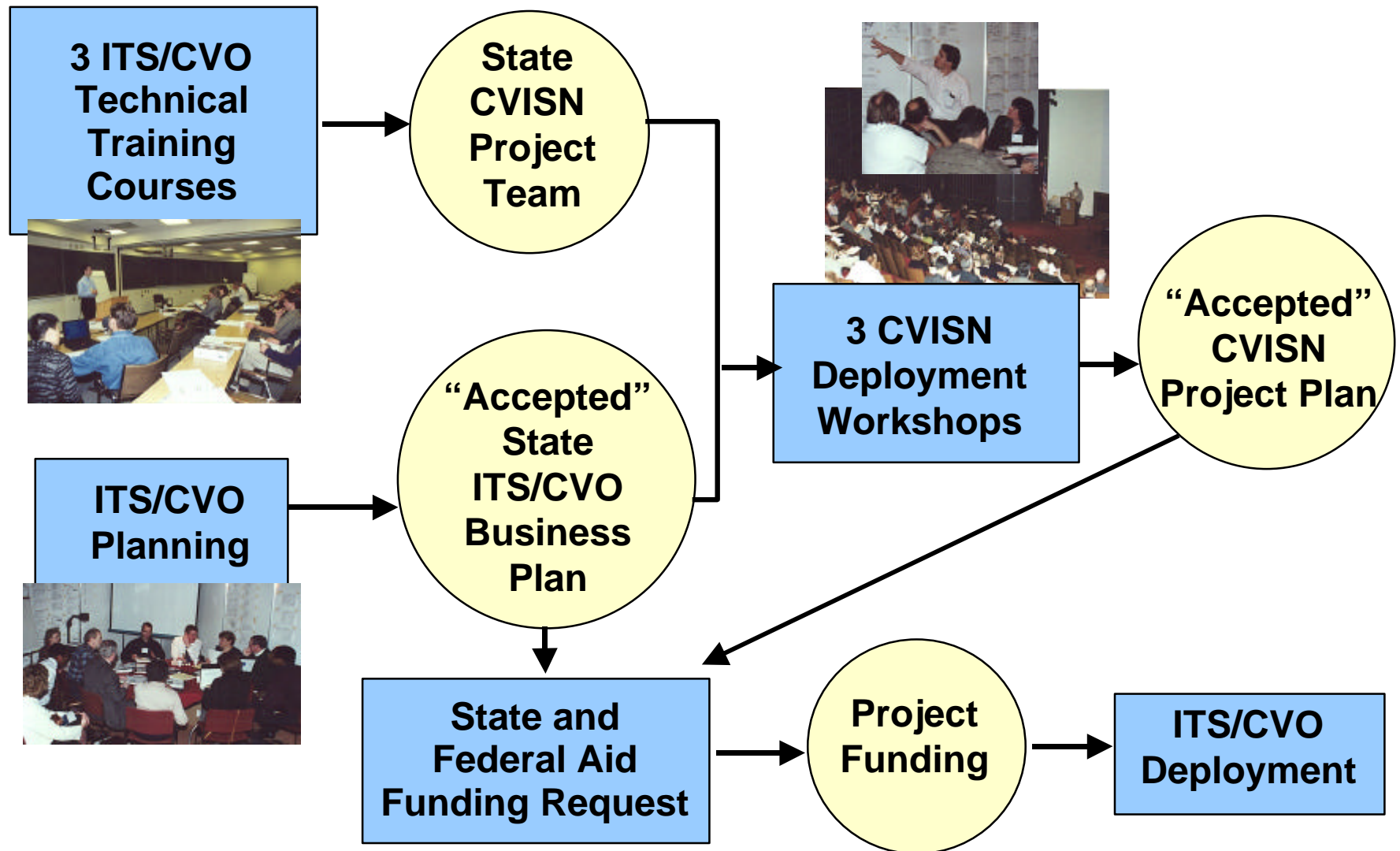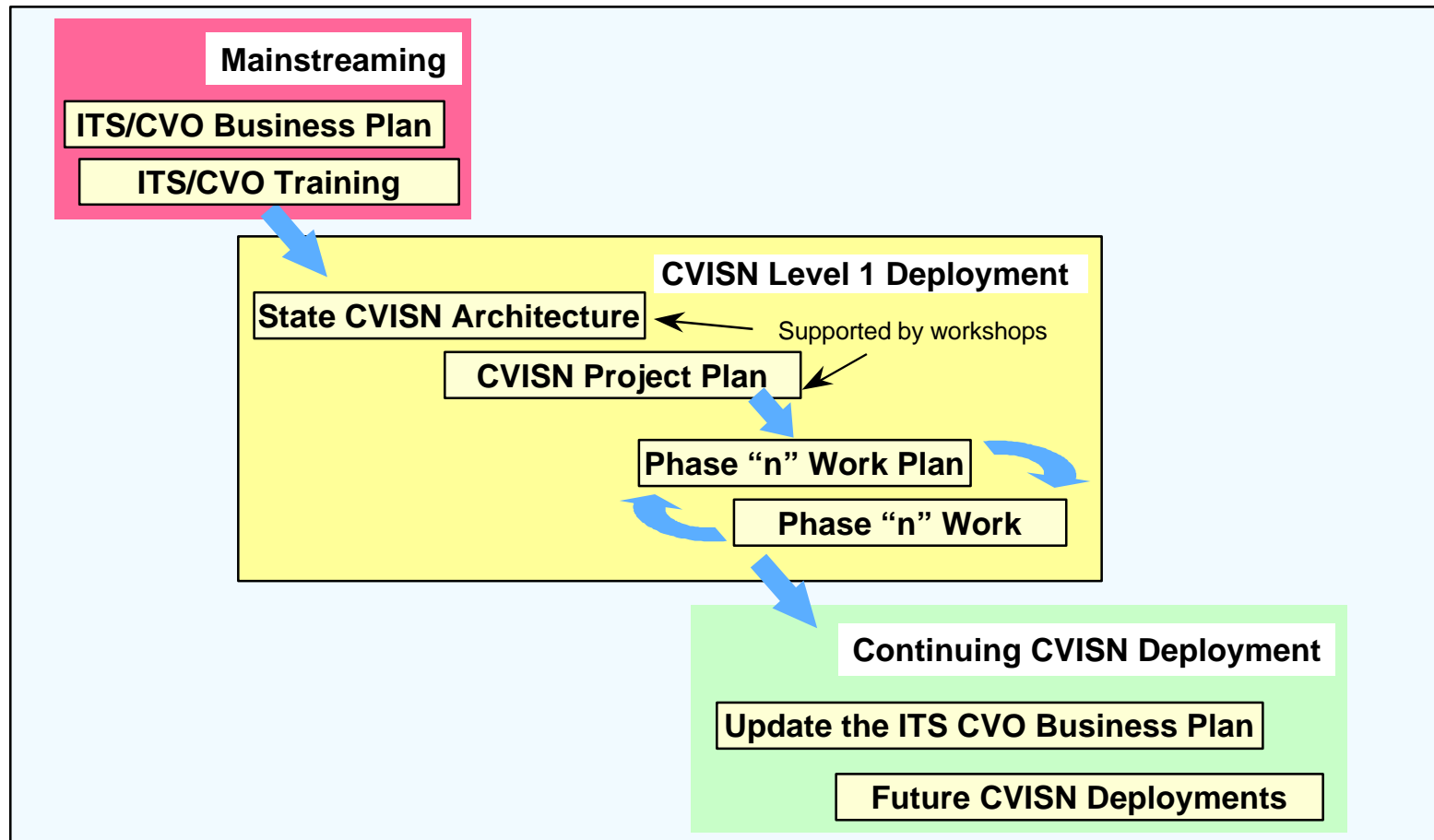- Public/private partnerships

Phased Deployment Strategy

Plan

Prototype

Pilot (infrastructure and a few states)

Deployment (all interested states)

Operations & Maintenance (all deployment states)

ITS/CVO Deployment Strategy

Each state deploys CVISN capabilities incrementally, starting with comprehensive management & technical planning

Mainstreaming

ITS/CVO Business Plan

ITS/CVO Training

CVISN Level 1 Deployment

State CVISN Architecture ← Supported by workshops

CVISN Project Plan

Phase "n" Work Plan

Phase "n" Work

Continuing CVISN Deployment

Update the ITS CVO Business Plan

Future CVISN Deployments

An Integrated Strategy for ITS/CVO Deployment Technical Support

Experienced ITS/CVO Personnel

Knowledge

- Op Personnel
- Program Managers
- System Architects
- System Integrators
- System Developers
- Vendors

- Trainers
- Facilitators
- Champions

Training

Workshops & Conferences

Advisory Support

Direct Contact

E-mail

Documented Body of Knowledge
CVISN Deployment Tool Kit, Guides, Web-site, Videos, Example Documents, ...

Inexperienced ITS/CVO Personnel

Need to Know

- Op Personnel
- Program Managers
- System Architects
- System Integrators
- System Developers
- Vendors

Technical Training Course Descriptions

Course Title	Introduction to ITS/CVO	ITS/CVO Technical Project Management for Non-Technical Managers	Understanding ITS/CVO Technology Applications
Duration	1 1/2 days (12 hours)	2 days (16 hours)	2 days (16 hours)
Content	ITS/CVO program's purpose, structure, components, current and future implementation, and technology	Skills development for managing the design and implementation of ITS/CVO technology	Overview of CVISN architecture and technology, standards, and interoperability
Target Audience	Technical or non-technical managers and staff from the states, FHWA (OMC and Federal-aid), motor carrier industry, and other key stakeholders	Program & other non-technical managers and staff from the states and FHWA (OMC and Federal-aid)	Technical & program managers and staff from the states, FHWA (OMC and Federal-aid), motor carrier industry, and other key stakeholders
Required for Work-shops?	Recommended	Required	Required

Technical and Management Guides
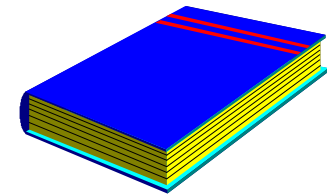
Guides - Definition and Contents:

Guides for the CVISN Deployment are a series of concise documents that capture information, knowledge, and lessons learned for use by the model deployment states. The guides are being prepared by JHU/APL for distribution in the summer of 1999.
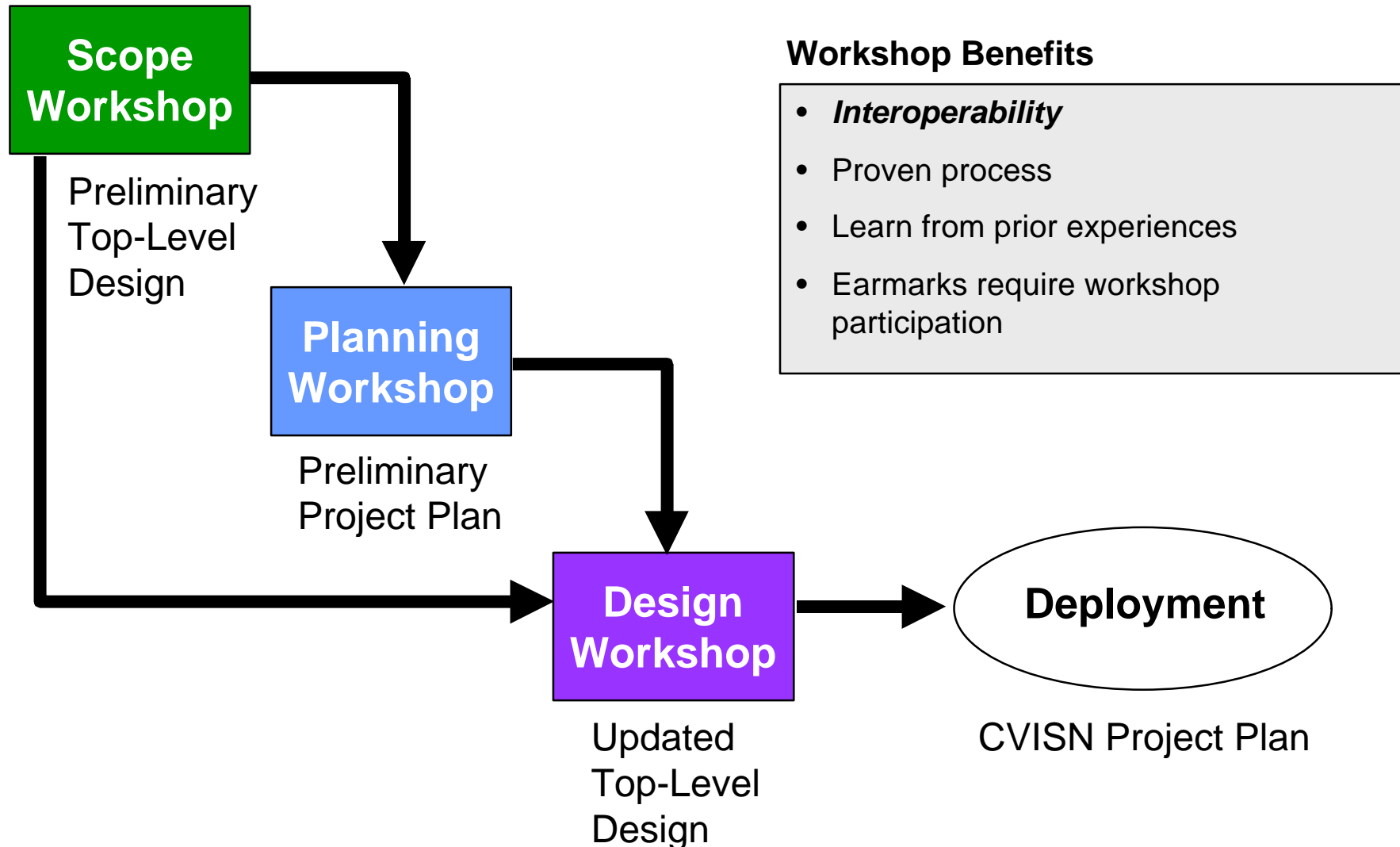
Management Guides:
- Introduction to CVISN
- Project Planning
- Phase Planning & Tracking

Technical Guides:
- Top-Level Design
- Integration & Test
- Safety Information Exchange
- Credentials Administration
- Electronic Screening

The Workshop Series

Scope Workshop

Preliminary Top-Level Design

Workshop Benefits

- *Interoperability*
- Proven process
- Learn from prior experiences
- Earmarks require workshop participation

Planning Workshop

Preliminary Project Plan

Design Workshop

Updated Top-Level Design

Deployment

CVISN Project Plan

Advisory Support

A variety of technical and administrative experts are available to assist the states in achieving their CVISN goals. These include:

- Experienced personnel from the Model Deployment (Prototype and Pilot) States, especially State Project Leaders and System Architects

- FHWA ITS/CVO personnel from Headquarters, Resource Centers, and Division Offices

- Mainstreaming Champions

- ITS America

- Motor Carrier Associations

- State Associations (AAMVA, CVSA, IRP Inc., IFTA Inc., Others)

ITS/CVO WWW Sites

The ITS/CVO site on the WWW is maintained by JHU/APL to provide a source of current planning and technical information for the CVISN Program, and to distribute program documentation for review, feedback, and use.

FHWA/OMC also maintains an excellent site containing news and reports related to ITS/CVO.

http://www.jhuapl.edu/cvo/

http://www.avalon-ais.com/ itscvo/main.htm

ITS/CVO WWW Sites (cont.)

Other WWW sites which are good sources of planning and background information for ITS/CVO include:

http://www.fhwa.dot.gov
- Federal Highway Administration

http://www.itsa.org
- ITS America

http://www.nga.org
- National Governors' Association

http://cvoz.uky.edu
- University of Kentucky Transportation Center

http://www.westernmainstreaming.org
- Western States ITS/CVO Mainstreaming Consortium

http://www.gcmpic.ai.uic.edu/cvogrp/cvo.html
- CVO Work Group, Gary-Chicago-Milwaukee Corridor

http://www.ctre.iastate.edu/projects/attech/midwest/
- Center for Transportation Research and Education, Iowa State University

http://www.its.fhwa.dot.gov/cyberdocs/welcome.htm
- ITS Electronic Document Library (EDL)

http://www.its.dot.gov
- ITS Joint Program Office

http://www.inawgits.com/jpo/icdn
- ITS Cooperative Deployment Network (ICDN)

THE INTERNET
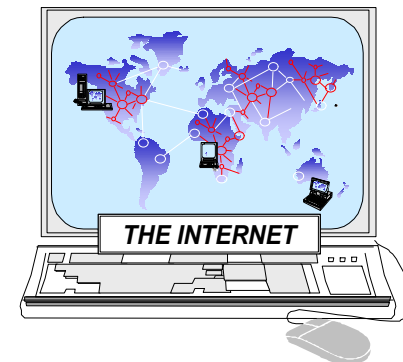
Outreach/Technology Truck

Outreach Methods

- Motor Carrier Industry Awareness Seminars

- ITS/CVO Brochures

- Technology Truck

  - A national demonstration vehicle containing ITS/CVO technologies, classroom-type facilities, and informational kiosks

http://www.ornl.gov/dp111/index.htm

Recap & Questions

Module Objectives:

- Describe ITS/CVO Mainstreaming

- Identify Potential ITS/CVO Funding Sources

- Describe the ITS/CVO Deployment Strategy

- Outline the CVISN Implementation Process

- Identify Sources of Technical Assistance

Any Questions?

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